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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/874,065	06/06/2001	Liana Liyow Fong	YOR920010256US1	5652

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EXAMINER
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SHAH, NILESH R

ART UNIT	PAPER NUMBER
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2195

DATE MAILED: 10/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/874,065	<b>Applicant(s)</b> FONG ET AL.	
	<b>Examiner</b> Nilesh Shah	<b>Art Unit</b> 2195	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 08 August 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. Claims 1-20 are presented for examination.

#### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

- a. A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
3. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Armstrong et al (6,279,043) (hereinafter Armstrong) in view of Molloy (6,105,147).
4. As per claim 1, Armstrong teaches a method for performing event-driven computations on individual phases in a plan that itself dynamically responds to changes and devises its own course of action, comprising the steps of:  
  
providing cooperating source phases for performing computations, where each of the cooperating source phases executes independently and include an associated program for performing the computations (abstract; col. 2 lines 37-60; col. 5 lines 54-67; col. 8 lines 27-33);

creating at least one target phase from at least one of the cooperating source phases, the at least one target phase performing target phase computations(col. 7 lines 21-27; col. 8 lines 45-60; col. 13 lines 35-50); and

initiating an asynchronous transaction for specific and separate phases of the at least one target phase or the cooperating source phases with a remote agent or another phase such that events can be directed to the specific and separate phases (col. 7 lines 55-67; col. 10 lines 21-40; col. 15 lines 25-50).

5. Armstrong does not specifically teach the use of a receipt message.

Molloy teaches each of the specific and separate phases asynchronously coordinates to external events by waiting on completion of a transaction and receipt of a message of external information prior to completion of the computations or the target phase computations, and identifies a receipt message corresponding to the asynchronous transaction (Fig 3d element 378; Fig 3b, elements 310-322; col. 7 lines 30-60; col. 8 lines 7-10; col. 8 lines 46-52, col. 8 lines 60-67).

6. It would have been obvious to one skilled in the art at the time of the invention was made to combine the teachings of Molly and Armstrong because Molly's use of a transaction receipt would improve Armstrong's system by being able to keep track of the completion of each transaction.

7. As per claim 2, Molloy teaches a method further comprising the step of notifying the cooperating source phases of completion of the target phase computations, wherein, upon

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notification, the cooperating source phases perform further tasks (Fig 3d element 378, col. 8 lines 46-52, col. 8 lines 60-67).

8. As per claim 3, Molloy teaches a method wherein the cooperating source phases receiving the notification and the at least one target phase sends the notification (col. 8 lines 46-52, col. 8 lines 60-67).
9. As per claim 4, Molloy teaches a method, wherein respective cooperating source phases are dependent on respective target phases of the at least one target phase, and performs the computations after completion of each target phase computation associated with a respective cooperating source phase (col. 12 lines 4-10, col. 8 lines 46-52, col. 8 lines 60-67).
10. As per claim 5, Armstrong teaches a method further comprising the step of receiving timed notification for termination for any pending asynchronous transaction ((abstract; col. 2 lines 37-60; col. 5 lines 54-67; col. 8 lines 27-33).
11. As per claim 6, Armstrong teaches a method wherein, upon the timed notification, the cooperating source phases perform further tasks (col. 7 lines 55-67; col. 10 lines 21-40).

12. As per claim 7, Armstrong teaches a method further comprising the step of receiving timed notification for termination of the each cooperating source phase (col. 7 lines 55-67; col. 10 lines 21-40; col. 15 lines 25-50).
13. As per claim 8, Molloy teaches a method further comprising the step of providing event listeners associated with the at least one target phase or the cooperating source phases, the event listeners providing selected ones of the at least one target phase and the cooperating source phases with external event-driven information such that the selected ones of the cooperating source phases and the at least one target phase respond to changes associated with the external event-driven information (col. 7 lines 35-50)
14. As per claim 9, Molloy teaches a method, further comprising the steps of sending an external request by a target phase of the at least one target phase; and routing a message in response to the request via the event listener to the at least one target phase (Fig 3d element 378, col. 8 lines 46-52, col. 8 lines 60-67, col. 7 lines 35-50).
15. As per claim 10, Molloy teaches a method wherein the message is first routed via a dispatcher to a planning coordinator (col. 7 lines 3-8).
16. As per claim 11, Molloy teaches a method wherein the message includes planning address information that identities (i) the planning coordinator, (ii) phase and (iii) event listener for routing the message (col. 7 lines 3-8, col. 8 lines 46-52, col. 8 lines 60-67).

17. As per claim 12, Armstrong teaches a method wherein the each cooperating source phase and the at least one target phase executes independently of each other (col. 4 lines 35-55; col. 7 lines 21-27; col. 8 lines 45-60; col. 13 lines 35-50).
18. As per claim 13, Armstrong teaches a method further comprising the step of retracting one of the at least one target phases (abstract; col. 2 lines 37-60; col. 5 lines 54-67; col. 8 lines 27-33);
19. Claim 14 is rejected based on the same rejection as claim 1 above.
20. As per claim 15, Armstrong teaches a system further comprising means for routing the message of external information to one of the cooperating source phases or one or more of the at least one target phases (col. 7 lines 55-67; col. 10 lines 21-40; col. 15 lines 25-50).
21. As per claim 16, Armstrong teaches a system wherein the means for routing includes:  
a dispatcher at least one router, the dispatcher providing the message of external information to a predetermined one of the at least one router based on message information associated with the message the of external information (col. 7 lines 55-67; col. 10 lines 21-40; col. 15 lines 25-50);

at least one planning coordinator, the predetermined router providing the message of external information to a predetermined one of the at least one planning coordinator based on the message information associated with the message of external information, wherein the predetermined planning coordinator provides the message of external information to an event listener associated with one of the cooperating source phases or the at least one target source form completion (col. 2 lines 37-60; col. 5 lines 54-67; col. 8 lines 45-60; col. 13 lines 35-50).

22. Claim 17 is rejected based on the same rejection as claim 1 above.

23. As per claim 18, Molloy teaches a method wherein the plan is event-driven, each of the cooperating source phases includes event listeners, and the plan includes a dispatcher, routers, and a planning coordinator, and wherein the method further comprises: keeping track, with the planning coordinator, of an execution of the plan and mapping events to the event listeners of each of the cooperating source phases (col. 7 lines 3-8, col. 8 lines 46-52, col. 8 lines 60-67).

24. Claims 19-20 are rejection based on the same rejection as claim 18 above.



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***Conclusion***


25. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nilesh Shah whose telephone number is (571)272-3771. The examiner can normally be reached on 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng An can be reached on (571)272-3756. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nilesh Shah  
Examiner  
Art Unit 2195

NS  
October 20, 2005

  
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